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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,187	01/23/2004	Joseph Kuo	SIPT122305	7843
26389	7590	12/14/2005	EXAMINER	
CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC			KIM, YOON YOUNG	
1420 FIFTH AVENUE			ART UNIT	
SUITE 2800			PAPER NUMBER	
SEATTLE, WA 98101-2347			1723	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,187

Applicant(s)

KUO, JOSEPH

Examiner

Yoon-Young Kim

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlquist et al., U.S. Patent No. 5,019,255 in view of Donovan, U.S. Patent No. 3,989,629.

Regarding Claim 1, Dahlquist discloses a filter comprising: a plurality of superposed support units (#10), each of which includes an annular inner support member (#10b) and an annular outer supporting member (#10a), the inner supporting members having a central hole (#21), and an outer periphery that is formed with a fixed guide rail unit (#13) therealong, each of the outer supporting members having an inner periphery that is formed with a fixed guide rail unit therealong (#12), the inner and outer supporting members being arranged in a vertical row; a plurality of stirring members having a plurality of ribs (#24d); a top cover (#25) having a central hole (#31) and at least one side hole (#20b); a bottom cover (#26) having a central hole and at least one side hole (#18a, 19a, 20a); and a plurality of filter units (#11). However Dahlquist does not disclose that the stirring member having inner and outer rings. Donovan teaches a filter comprising a stirring member (#21) having an inner ring (#22), outer ring (#18), and ribs (#21A). It would have been obvious to one of ordinary skill in the art to modify Dahlquist with the element of Donovan because the stirring member of Dahlquist can be in the form of discs (Col. 3, Lines 59-62).

Regarding Claim 3, Dahlquist discloses guide rail units but does not disclose that they are L-shaped. The L-shape has no mechanical function and cannot be relied upon to patentably distinguish the claimed invention from the prior art. In re Seid, 73 USPQ 431 (1947). The guide rail units of Dahlquist are deemed to be a structure equivalent to L-shaped guiding blocks of the invention.

Regarding Claim 4, Donovan discloses that the top cover has an upwardly and gradually converging top surface (#13), and an outer peripheral portion that is formed with a plurality of peripheral holes formed therethrough, the bottom cover having a downwardly and gradually converging bottom surface (#14), and an outer peripheral portion that is formed with a plurality of peripheral holes formed therethrough, the filter further comprising a plurality of lock bolt and nut units (#17, 17A) that extend respectively into the peripheral holes in each of the top and bottom covers.

3. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlquist in view of Donovan as applied to Claim 1 above, and further in view of Baker, U.S. Patent No. 3,187,898.

Regarding Claim 2, Donovan discloses that each of the ribs of the stirring members is curved (#21A) but does not disclose inclined side surfaces. Baker teaches a filter comprising a stirring member with inclined surfaces (#47). It would have been obvious to one of ordinary skill in the art to modify Dahlquist in view of Donovan with the element of Baker because such stirring members are common in the filter art.

Regarding Claim 7, Dahlquist in view of Donovan does not disclose tongues and grooves on the inner supporting members. Baker discloses a circumferential row grooves and tongues (#62, 63) fitting to arrange filter members in a vertical row. It would have been obvious

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to one of ordinary skill in the art to modify Dahlquist in view of Donovan with the element of Baker because it is a common method of coupling in the filter art.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlquist in view of Donovan as applied to Claim 1 above, and further in view of Galimi et al., U.S. Patent No. 4,255,263.

Regarding Claim 5, Dahlquist in view of Donovan does not disclose the support members being made of hard and soft material. Galimi teaches a filter comprising stacked alternating members being of hard and soft material (Col. 2, Lines 36-39). It would have been obvious to one of ordinary skill in the art to modify Dahlquist in view of Donovan with the element of Galimi in order to efficiently engage and clamp the members (Col. 2, Lines 39-44).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlquist in view of Donovan as applied to Claim 1 above, and further in view of Handtmann, U.S. Patent No. 5,453,184.

Regarding Claim 8, Dahlquist in view of Donovan does not disclose an annular groove and an annular rib on the outer supporting members. Handtmann teaches a filter comprising annular grooves and ribs fitting to arrange the filter members in a vertical row (Fig. 1). It would have been obvious to one of ordinary skill in the art to modify Dahlquist in view of Donovan with the element of Dahlquist because it is a common method of coupling in the filter art.

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Allowable Subject Matter

6. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does not teach inner and outer supporting members of one of each adjacent pair of superposed support units made of a soft material and the inner and outer supporting members of the other one of each adjacent pair of the superposed support units made of a hard material.

Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yoon-Young Kim whose telephone number is (571) 272-2240. The examiner can normally be reached on 8:30-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YK

12/09/05


W. L. WALKER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700